

**Remarks**

**I. Introduction**

Claims 1-22, 25-36 and 38-41 are pending in this application. By this amendment, claims 1, 12, 22, 30 and 36 are amended to more clearly distinguish over the applied reference, claim 38 is amended to correct its dependency and claims 23, 24 and 37 are cancelled.

Reconsideration, in view of the foregoing amendments and following remarks is respectfully requested.

**II. Claim Rejections under 35 U.S.C. § 102(e)**

Claims 1-41 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,711,162 to Ortega et al. (hereinafter “the ‘162 patent”). Applicants respectfully traverse the rejection.

Regarding independent claim 1, Applicants respectfully submit that the ‘162 patent does not disclose or suggest a method for providing data from a client to an access concentrator using a gateway, comprising, *inter alia*, receiving, at a gateway, a non-PPPoE frame from the client that does not support PPPoE, wherein the non-PPPoE frame includes data intended for receipt by an access concentrator that supports PPPoE, encapsulating, at the gateway, the first non-PPPoE frame to generate a PPPoE frame, wherein the PPPoE frame includes the data intended for receipt by the access concentrator, and providing the PPPoE frame to the access concentrator from the gateway thereby establishing a virtual PPPoE session for the client that does not support PPPoE, as recited in claim 1.

In contrast, the ‘162 patent teaches a system in which a modem located at the user end acts as a proxy for service endpoints in a data network so that a host computer connected to the

modem can communicate with the service endpoints where the service endpoints **do not support** the host computer's network protocols (i.e., PPPoE). Therefore, contrary to the assertions made in the office action, the '162 patent does not teach the steps of encapsulating a first non-PPPoE frame to generate a PPPoE frame, wherein the PPPoE frame includes the data intended for receipt by the access concentrator. A process that is nearly opposite to that of claim 1 is performed in as much as a PPPoE frame is converted to a non-PPPoE frame before being sent to the access concentrator. In relevant portion, Col. 11. line 12 reads, "***The PPPoE/PPP process 54 transparently converts the PPPoE packets to PPP packets by stripping the PPPoE/MAC header form the Ethernet packet and forward it out the appropriate interface as dictated by the route selection in step 2.***" Therefore, in this system, because the equipment at the service endpoint does not support PPPoE, frames sent to the concentrator are not PPPoE-based.

Similarly, in the context of independent claim 12, Applicants submit that the '162 patent fails to disclose a method for providing data from an access concentrator to a non-PPPoE client using a gateway, the method comprising, *inter alia*, receiving, at a gateway, a PPPoE frame from the access concentrator, wherein the PPPoE frame includes data intended for receipt by the client, deencapsulating, at the gateway, the PPPoE frame to generate a non-PPPoE frame, wherein the non-PPPoE frame includes the data intended for receipt by the client and providing the non-PPPoE frame to the non-PPPoE client from the gateway, as recited in claim 12. The '162 patent does not teach receiving a PPPoE frame at a gateway from an access concentrator and deencapsulating the frame to generate a non-PPPoE frame for the client. In the '162 patent the client receives PPPoE frames.

Regarding claim 22, Applicants submit that the '162 patent fails to disclose the steps of receiving, at a bridge, a first frame having a PPPoE format from a first client that supports

PPPoE, wherein the first frame is intended for receipt by an access concentrator and receiving, at the bridge, a second frame having a non-PPPoE format from a second client that does not support PPPoE, wherein the second frame is intended for receipt by the same access concentrator, as stated in claim 22. The '162 patent does not disclose a method of receiving at the same access concentrator frames from clients that support and don't support PPPoE respectively.

Regarding claim 30, Applicants respectfully submit that the '162 patent fails to disclose a system comprising, *inter alia*, a first interface adapted to receive a first frame having a non-PPPoE format from a first client and to provide a second frame having a non-PPPoE format to the first client, a second interface adapted to receive a third frame having a PPPoE format from an access concentrator and to provide a fourth frame having a PPPoE format to the access concentrator and a PPPoE stack adapted to encapsulate the first frame having a non-PPPoE format into the fourth frame having a PPPoE format, and wherein the PPPoE stack further is adapted to deencapsulate the third frame having a PPPoE format into the second frame having a non-PPPoE format, as recited in claim 30. As noted above, the '162 patent does not disclose receiving non-PPPoE frames and providing non-PPPoE frames to a client, wherein the PPPoE stack encapsulates non-PPPoE frames into PPPoE formatted frames to provide to an access concentrator and deencapsulates PPPoE frames into non-PPPoE frames to provide to the client.

Finally, regarding claim 36, Applicants submit that the '162 patent fails to disclose a distributed network comprising a plurality of clients in communication with at least one gateway over a network and in communication with at least one access concentrator via the gateway, the gateway comprising, *inter alia*, a first interface adapted to receive a first non-PPPoE frame from a first client and to provide a second non-PPPoE frame to the first client, a second interface

adapted to provide a first PPPoE frame to an access concentrator and to receive a second PPPoE frame from the access concentrator, a means for encapsulating the first non-PPPoE frame to generate the first PPPoE frame, and a means for deencapsulating the second PPPoE frame to generate the second non-PPPoE frame, wherein the first interface further is adapted to receive a third PPPoE frame from a second client and to provide a fourth PPPoE frame to the second client, and the second interface further is adapted to receive the fourth PPPoE frame from an access concentrator and to provide the third PPPoE frame to the access concentrator as recited in claim 36. The '162 patent does not disclose providing PPPoE frames to a concentrator and providing non-PPPoE frames to client.

In order for a rejection under § 102 to be valid, each and every claim element must be explicitly or inherently disclosed. As set forth above, because, the system described in the '162 patent fails to teach the specific elements of at least independent claims 1, 12, 22, 30 and 36 as amended, Applicants respectfully submit that the rejection is improper. Moreover, because the system described in the '162 patent deals with communication systems at the service provider end that is non-PPPoE compliant and the system of the claimed invention relate to communication systems in which user end equipment is non-PPPoE compliant, Applicants respectfully submit that the differences between the claimed invention and the system of the '162 patent would have been non-obvious to a person of ordinary skill in the art at the time of the invention. Accordingly, withdrawal of the rejection is respectfully requested.

### III. Conclusion

Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-22, 25-36 and 38-41 are earnestly solicited. Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

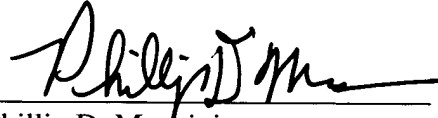
Respectfully submitted,

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